

No. 676,498.

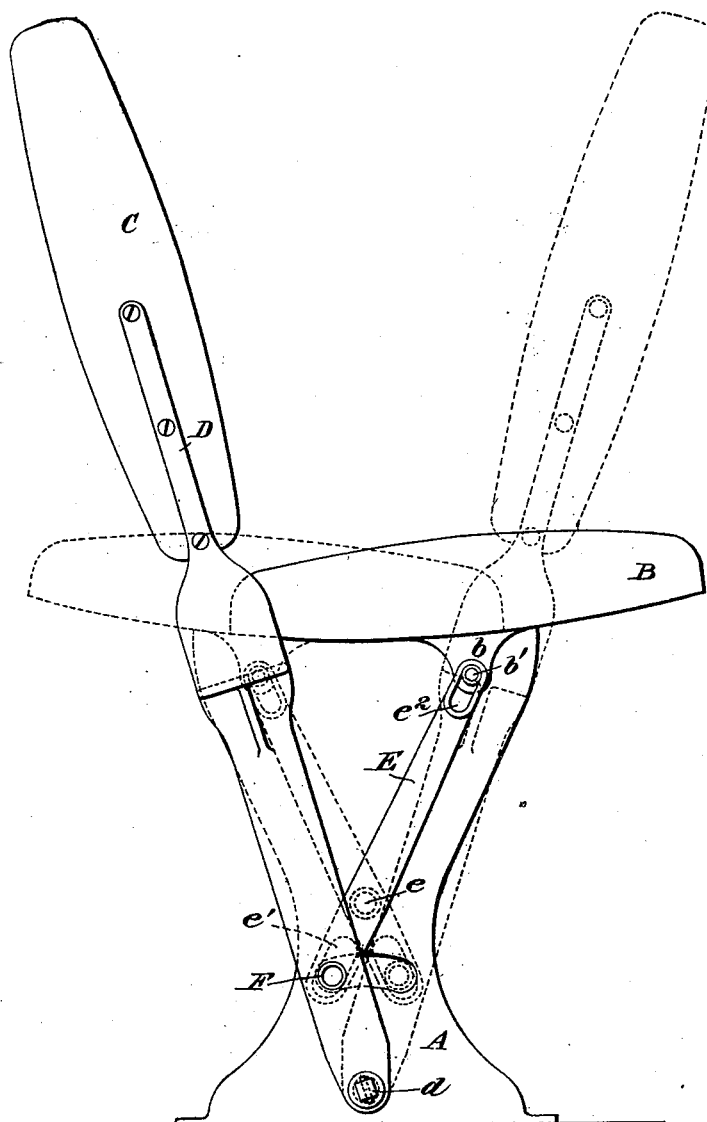
Patented June 18, 1901.

F. W. HUNTER.

SEAT.

(Application filed May 10, 1899.)

(No Model.)



Witnesses:

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Inventor.

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Att'ys.

UNITED STATES PATENT OFFICE.

FREDERIC W. HUNTER, OF CRANFORD, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE HALE AND KILBURN MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

SEAT.

SPECIFICATION forming part of Letters Patent No. 676,498, dated June 18, 1901.

Application filed May 19, 1899. Serial No. 717,521. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. HUNTER, a citizen of the United States, residing at Cranford, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Seats, (Case A,) of which the following is a specification.

The invention is especially applicable to seats for railway and similar vehicles, and will be described herein in that connection. Its object is to produce a seat consisting of but few parts, which shall be simple and durable in construction, inexpensive of manufacture, and which shall be easily and readily adjustable.

The invention concerns more particularly that type of seats occupying a fixed position and in which the seat-cushion and seat-back are adjusted or rearranged accordingly as the seat is designed to face one way or the other.

It further concerns that class of seats of the type mentioned in which mechanism is provided intermediate of the back and seat-cushion whereby the movement of the former produces a corresponding movement of the latter. In seats of this class the seat-cushion is adapted for lateral adjustment in order that in one or the other position of these seat elements each will bear to the other the proper relation.

In carrying out my invention I provide a seat-frame bearing a seat-cushion capable of transverse movement. I also employ a seat-back preferably supported upon end arms extending to and pivoted upon the floor adjacent to the seat-frame or to the seat-frame itself. Pivoted to each of the upright members of the seat-frame is a seat-shifting lever, one end of which is connected with the seat-cushion, the other end being connected with an end arm supporting the seat-back. These levers are so pivoted as that the movement of the seat-back forward or backward will result in a backward or forward movement of the seat-cushion. A rod extends from one end arm to the other and is secured at its ends to said arms. This rod in the present embodiment of the invention passes through elongated slots in the ends of the seat-shift-

ing levers and in either position of the seat is so located between the end members of the seat-frame as to form a foot rest or support.

The invention is illustrated in the accompanying drawing, in which the figure is an end elevation of a seat embodying my improvements.

Referring in detail to the drawing, A designates one of the two supporting members of the seat-frame. This is preferably of metal and may be secured to the floor by bolts or othersuitable means. The upperends of the supporting-frames carry a seat-cushion B, the latter being so arranged as to be free to move transversely, as indicated in dotted lines.

C designates the seat-back. This is supported by means of end arms D. The lower ends of these arms may be pivoted either to the floor or to the seat-frames A. In the drawing I have illustrated said arms as pivoted at *d* to the seat-frames.

E designates a seat-shifting lever. Of these there are two, one at each end of the seat. The lever E is pivoted at *e* to the frame A. Each end is provided with an elongated slot *e'* *e''*. At the upper end the lever E is connected with an ear *b*, depending from the under side of the seat-cushion B or of the cushion-frame, where such a frame is employed. The ear *b* is provided with the pivot *b'*, passing through the elongated slots *e''*, thereby securely but movably connecting the lever E with the seat-cushion B.

F designates the foot rest or support. As herein shown, this consists of a pipe or rod passing through the elongated slots *e'* in the lever E and secured at each end to an end arm D.

The operation of the seat above described will be apparent from the full-line and dotted-line positions shown in the drawing. Said drawing illustrates in full lines that position of the seat facing to the right. In order to reverse the seat so that it shall face to the left, it is only necessary to press the back C to the right, whereupon the end arms D, through the foot-rest F, will operate to move the levers E upon their pivots *e*, thereby causing the upper ends of said levers to move the

seat-cushion or the supporting-frame in which said seat-cushion is carried to the left. The dotted lines in the drawing illustrate the resulting position of the various members. It will be seen that in moving the seat-back C to the position shown in dotted lines the foot-rest F is correspondingly moved. The position in which the parts are finally left is shown in dotted lines. In reversing the seat to this position the foot rest or support F is also shifted into position for use by the occupant of the next seat adjacent to the one illustrated.

In addition to the advantages heretofore referred to it will be noted that in the seat above described the whole of the space intermediate of the end members of the supporting-frame and between the floor and the seat-cushion is left open and free for packages, &c. The foot-rest F is also moved backwardly, so as to be out of the way, but in position for the occupant of the next seat. Another advantage is that by the construction described provision is made for bringing great leverage to bear upon the mechanism for moving the chair seat or cushion, but slight effort being necessary to move the seat-back and cause the corresponding movement of the seat-cushion and foot-rest.

Although I have herein described an embodiment of my invention in which the mechanism is adapted to bodily shift the cushion, rather than to tilt or cant the same, I desire it understood that the invention is not limited thereto, although I deem this feature desirable.

Having now described my invention, what I claim is—

1. In a seat, the combination with a supporting-frame, a cushion and movable back, of movable supporting-arms for said back, and a foot-rest mounted upon and bodily movable with said arms, substantially as set forth.

2. In a seat, the combination with a supporting-frame, a cushion and movable seat-back, of supporting-arms for said seat-back, a foot-rest mounted on said arms and bodily movable therewith, and connections between said arms and said cushion, whereby the movement of the former will effect the shifting of the latter, substantially as set forth.

3. In a seat, the combination with a supporting-frame, a movable cushion and reversible seat-back, of supporting-arms for said seat-back, a foot-rest mounted on said arms and bodily movable therewith, and mechanism coacting with said foot-rest and said mov-

able cushion, whereby the movement of the seat-back and its supporting-arms will effect the shifting of said foot-rest and the movement of said cushion, substantially as set forth.

4. In a seat, the combination with a supporting-frame, a movable cushion and reversible seat-back, of supporting-arms for said seat-back, a shifting foot-rest connected with said arms, and levers coacting with said foot-rest and said cushion, whereby the movement of the seat-back and its supporting-arms will, through said foot-rest, effect the movement of said cushion, substantially as set forth.

5. In a seat, the combination with a supporting-frame, of a cushion adapted to move forward and rearward and to rest in either position with its outer edge above its inner edge, a movable seat-back, supporting-arms therefor, a foot-rest mounted upon said arms, and mechanism coacting with said foot-rest and said arms, whereby the movement of the seat-back, its supporting-arms and the foot-rest will effect the movement of said cushion, substantially as set forth.

6. In a seat, the combination with a supporting-frame, a cushion and movable seat-back, of supporting-arms for said back pivoted at or near the floor, and a foot-rest connecting said arms and assuring synchronous movement thereof, substantially as set forth.

7. In a seat, the combination with a supporting-frame and movable cushion, of a seat-back, pivoted end arms supporting said seat-back, a foot-rest extending between and connecting said end arms, and pivoted levers each connected at one end to said foot-rest and at the other end to said cushion, substantially as set forth.

8. In a seat, the combination with a supporting-frame having slots, of a movable cushion, a seat-back, end arms supporting said seat-back, a foot-rest extending between and connecting said end arms and having movement in said slots in the supporting-frame, and mechanism intermediate of said foot-rest and cushion whereby the movement of the end arms and foot-rest will cause a corresponding movement of said cushion, substantially as set forth.

This specification signed and witnessed this 10th day of May, 1899.

FREDERIC W. HUNTER.

Witnesses:

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